

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Morris Lithium Battery Fire - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: POLREP #1
Morris Lithium Battery Fire

Morris, IL
Latitude: 41.3631780 Longitude: -88.4120145

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From: Leonard Zintak, On-Scene Coordinator

Date: 6/30/2021

Reporting Period: 6/29/2021 - 6/30/2021

1. Introduction

1.1 Background

Site Number:	Contract Number:
D.O. Number:	Action Memo Date:
Response Authority: CERCLA	Response Type: Emergency
Response Lead: EPA	Incident Category: Removal Action
NPL Status: Non NPL	Operable Unit:
Mobilization Date: 6/29/2021	Start Date: 6/29/2021
Demob Date:	Completion Date:
CERCLIS ID:	RCRIS ID:
ERNS No.:	State Notification: 6/29/2021
FPN#:	Reimbursable Account #:

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

The site is located 900 E Benton Street in Morris, Grundy County, Illinois. At approximately 12:00 pm on June 29th, Morris Fire Department responded to a fire at the old Federal Paper Board building, now owned by Superior Battery Inc., which was being used to store a large quantity of lithium batteries, solar panels and other waste ele. Approximately 184,000 lbs of lithium batteries are thought to have been stored in the building. Because the fire contains lithium, the Morris Fire Department initially made the decision to let the fire burn itself out, as water and fire fighting foam can aggravate the fire and cause environmental damage.

1.1.2.1 Location

900 E Benton Street, Grundy County, Morris, Illinois.

1.1.2.2 Description of Threat

The Superior Battery building housed several tons of lithium batteries that have been mostly consumed in the fire. The smoke plume threatened to release contaminants into the atmosphere potentially exposing nearby residents to hazardous substances including particulates, metals, and volatile organics.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On-Scene Coordinators (OSCs) Leonard Zintak and Lauren McCarrell mobilized to the site on June 29, 2021. On June 29, 2021, at approximately 14:00 hours, EPA activated the Superfund Technical Assessment and Response Team (START) to respond to the incident.

According to the Morris Fire Chief, the fire was discovered at approximately 1200 hours on June 29, 2021. The Grundy County IL Emergency Management Agency ordered an emergency evacuation of residents within a 1/2 mile radius of the site.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

The Morris Fire Department and numerous other fire departments are on site monitoring the fire but are not suppressing the fire with water or fire fighting foam due to the possibility of a violent reaction with the lithium batteries. A mandatory evacuation was issued for all residents within a 1/2 mile radius till 9 p.m. on June 30, 2021. The evacuation order was then extended for another 24 hours till 9 p.m. on July 1, 2021. The evacuation center is located at First Christian Church, 455 W. Southmor Road in Morris.

USEPA deployed two OSCs and eight START contractors to provide air monitoring support for the fire.

USEPA consulted with Agency for Toxic Substances and Disease Registry (ATSDR), the Illinois Department of Public Health (IDPH), and the Grundy County Health Department to establish action levels for air monitoring data.

The Interagency Modelling and Atmospheric Assessment Center (IMAAC) was consulted by the Illinois Civil Support Team (CST) to develop plume models for the release. This model predicted potential plumes trending to the northeast and southeast from the site, with hazardous, very hazardous, and unhealthy soot levels as well as hydrogen fluoride levels that potentially could have extended into residential neighborhoods. Real-time air monitoring data did not show any elevated levels of contaminants in the residential areas above action levels.

USEPA START contractors are performing community air monitoring for volatile organic compounds (VOCs), lower explosive limit (LEL), carbon monoxide (CO), hydrogen sulfide (H₂S), oxygen (O₂), particulates, and hydrogen fluoride. Illinois CST members are also providing air monitoring support for the response by deploying AreaRAEs to monitor VOCs, LEL, CO, H₂S, and O₂.

Due to the lithium batteries contained within the building, the Morris Fire Department initially planned to let the fire burn itself out. After consulting with experts about lithium battery fire fighting techniques, the fire department decided to apply a dry chemical agent called "Purple K" with a small amount of water to suppress the fire. At approximately 14:00 on 6/30/21, the fire department removed part of the building wall and gained access to the fire from this location. They discovered a 30 by 40 foot area of burning batteries and applied the Purple K at approximately 15:30. The Purple K was unsuccessful in extinguishing the fire. After observing no adverse reaction to the application of Purple K and water, the fire department continued to apply water only to the burning area. They applied high flow water to the fire and once the batteries were cooled, the fire department applied Portland cement at approximately 18:00. The 30 by 40 foot battery area was covered with cement as well as a few hot spots within the building. The fire department completed application of cement at approximately 23:00 on 6/30/21 and have not observed any smoke from the batteries since.

IEPA is assessing the storm drains and outfalls to the Illinois River for potential runoff.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Jin Zheng, the president of Superior Battery Inc., has been identified as the Responsible Party.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

USEPA START contractors along with the CST members will continue to provide 24hour air monitoring support during the response while the fire is ongoing.

USEPA START contractors will also collect outdoor (ambient) air samples for laboratory analysis of metals (including lithium), alkaline dusts, and volatile organic compounds (VOCs).

2.2.1.1 Planned Response Activities

USEPA START contractors will continue to provide 24hour air monitoring support during the response while the fire is ongoing.

USEPA START contractors will also collect outdoor (ambient) air samples for laboratory analysis of metals (including lithium), alkaline dusts, and volatile organic compounds (VOCs).

2.2.1.2 Next Steps

2.2.2 Issues

Post-fire site stabilization activities for lithium battery cleanup.

2.3 Logistics Section

No information is available at this time

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining

Extramural Costs				
TAT/START	\$50,000.00	\$0.00	\$50,000.00	100.00%
Intramural Costs				
Total Site Costs	\$50,000.00	\$0.00	\$50,000.00	100.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Illinois Mutual Aid Box Alarm System (MABAS) is providing a safety officer

2.5.2 Liaison Officer

2.5.3 Information Officer

Lieutenant Nick Doerfler at Coal City Fire Protection District

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

EPA Region 5
 Illinois EPA
 Illinois State Police
 Illinois Emergency Management Agency
 Illinois Civil Support Team
 Illinois Mutual Aid Box Alarm System
 Grundy County Sheriffs
 US Coast Guard
 Grundy County EMA
 Grundy County Health Department
 Red Cross

4. Personnel On Site

EPA - 2
 START - 8
 Illinois EPA - 3
 IL CST - 12

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report
response.epa.gov/morrislithiumbatteryfire

6.2 Reporting Schedule
 It is anticipated that POLREPS will be provided at 24hour intervals

7. Situational Reference Materials

response.epa.gov/morrislithiumbatteryfire



